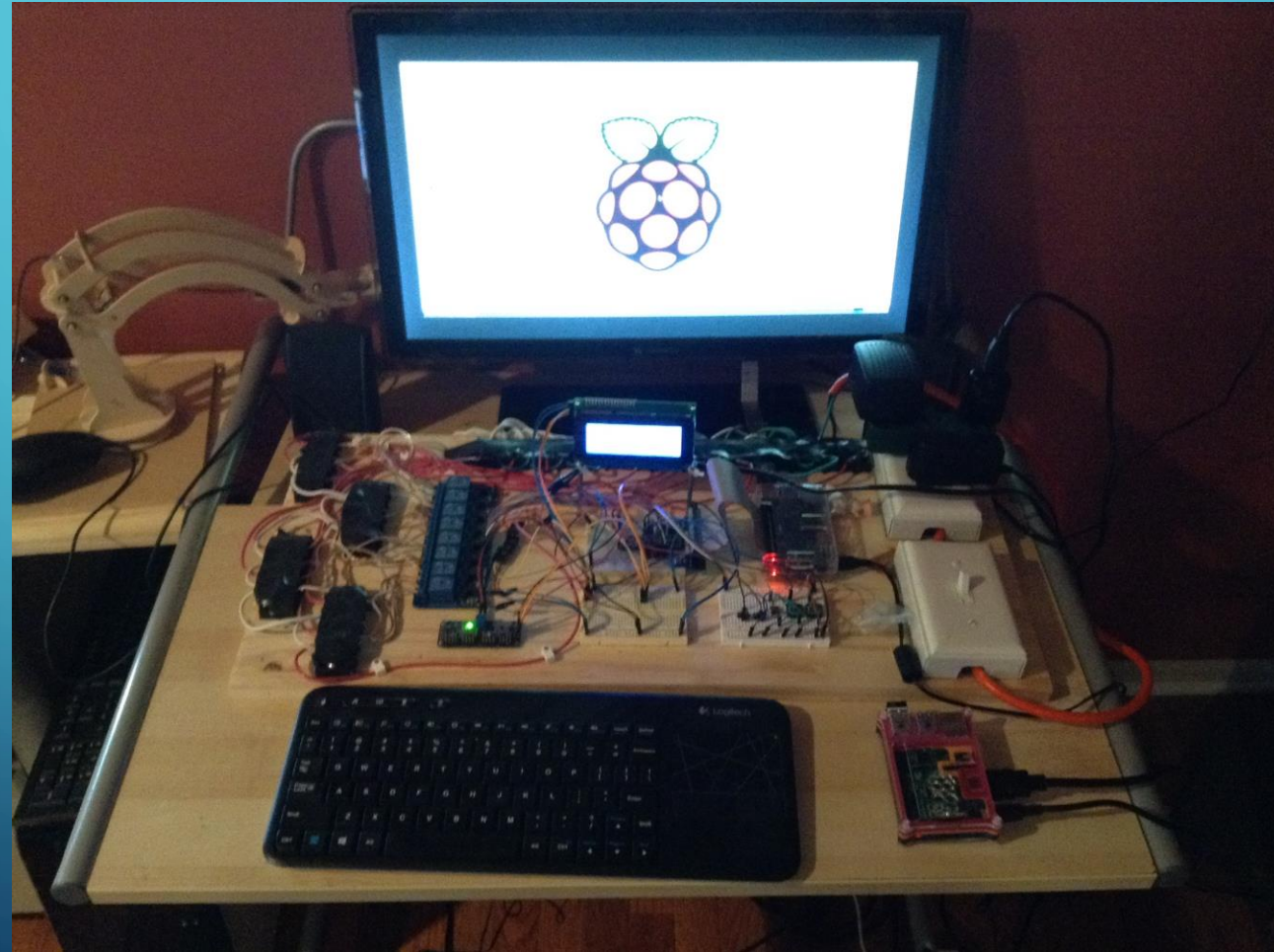




RASPBERRY PI

UTILIZING A RASPBERRY PI TO DRIVE A XMAS LIGHT WINDOW DISPLAY

MY TEST BOARD



TEST BOARD IS DESIGNED TO USE WIRINGPI V2 SOFTWARE

← Welcome

PiGlow added to the devLib →

WiringPi v2 (point 03) is released!

Posted on May 13, 2013 by Gordon

After some months of testing and time away due to family issues, a short holiday and what-not, **wiringPi** v2 has been pushed to the GIT repository and is now released!

Changes: 100's. There is now a completely re-written internal structure that allows for analogRead() and analogWrite() functions (hardware permitting – e.g. on the Gertboard and other A/D converters). There is a mechanism for adding new GPIO hardware – e.g. MCP23x17 (both I2C & SPI variants) and much much more!

As usual, feedback is welcome – my plan is to run a forum here shortly, but for now I'll allow comments on this post, or drop me email.

[HTTP://WIRINGPI.COM/](http://wiringpi.com/)

TEST BOARD UTILIZES SAINSMART RELAY & LCD BOARDS



[Click to open expanded view](#)

SainSmart 8-Channel Relay Module

by [SainSmart](#)

★★★★★ ▾ 85 customer reviews

| 14 answered questions

List Price: \$48.40

Price: **\$13.18** & **FREE Shipping** on orders over \$35.

[Details](#)

You Save: **\$4.92 (27%)**

In Stock.

Ships from and sold by Amazon.com. Gift-wrap available.

Want it tomorrow, April 5? Order within **5 hrs 19 mins** and choose **One-Day Shipping** at checkout. [Details](#)

- 5V 8-Channel Relay interface board, and each one needs 15-20mA Driver Current
- Equipped with high-current relay, AC250V 10A ; DC30V 11A
- Standard interface that can be controlled directly by microcontroller (Arduino , 8051, AVR, PIC, DSP, ARM, ARM, MSP432, TTL logic)
- Indication LED's for Relay output status



[Click to open expanded view](#)

SainSmart LCD Module For Arduino 20 X 4, PCB Board, White On Blue

by [SainSmart](#)

★★★★★ ▾ 173 customer reviews

| 11 answered questions

List Price: \$30.59

Price: **\$14.14** & **FREE Shipping** on orders over \$35.

[Details](#)

You Save: **\$16.45 (54%)**

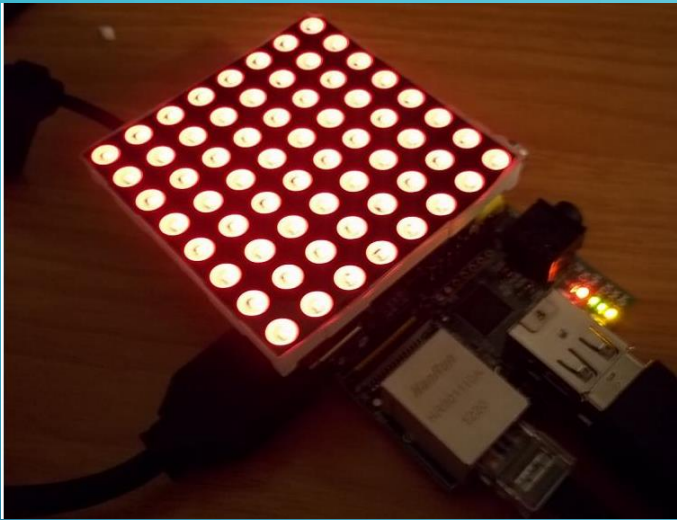
In Stock.

Ships from and sold by Amazon.com. Gift-wrap available.

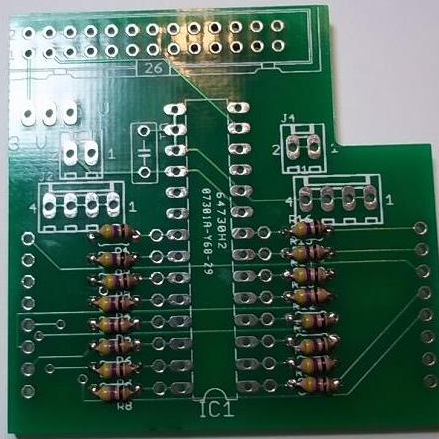
Want it tomorrow, April 5? Order within **5 hrs 15 mins** and choose **One-Day Shipping** at checkout. [Details](#)

- LCD module based on the popular HD44780 controller
- Works great with Arduino and other micro-controllers
- Tutorial/instructions can be found on manufacturer website.
- 4 rows, 20 characters

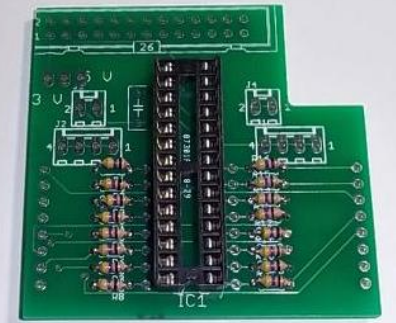
PI MATRIX BOARD



Install and solder 16 resistors as shown.



Install socket and solder it.

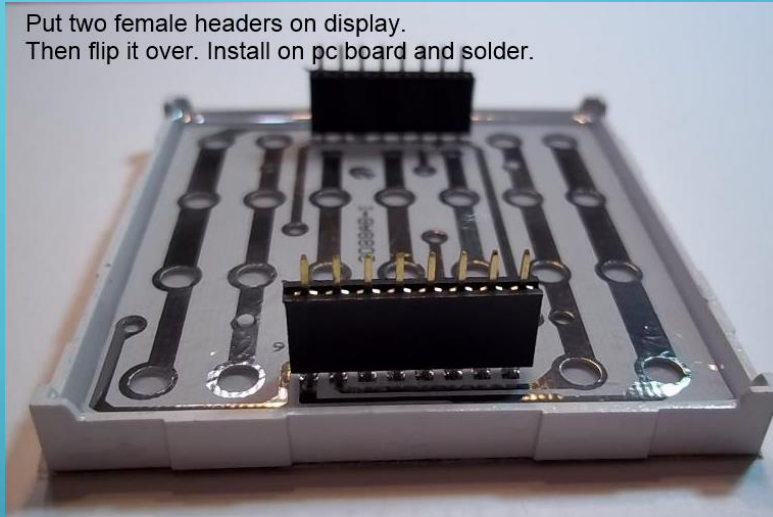


PI MATRIX BOARD

Install one capacitor and solder it.
Install pins as shown and solder.



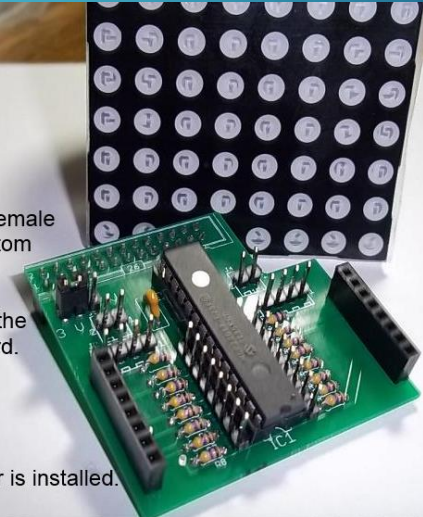
Put two female headers on display.
Then flip it over. Install on pc board and solder.



Install 26 pin female
header on bottom
of board.

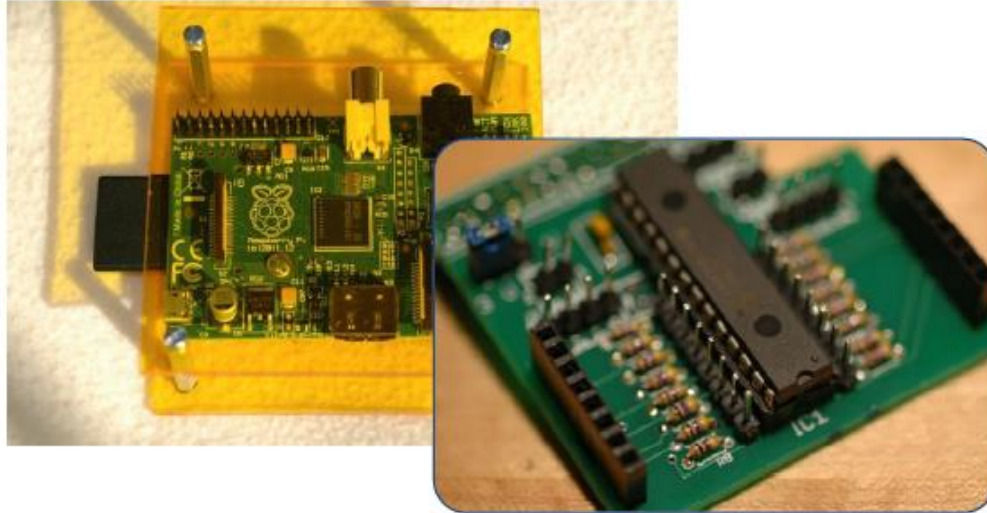
Solder it from the
top of the board.

Be sure jumper is installed.



[HTTP://WWW.MYPISHOP.COM/PI%20MATRIX.HTML](http://www.mypishop.com/pi%20matrix.html)

A LITTLE BIT OF PROGRAMMING



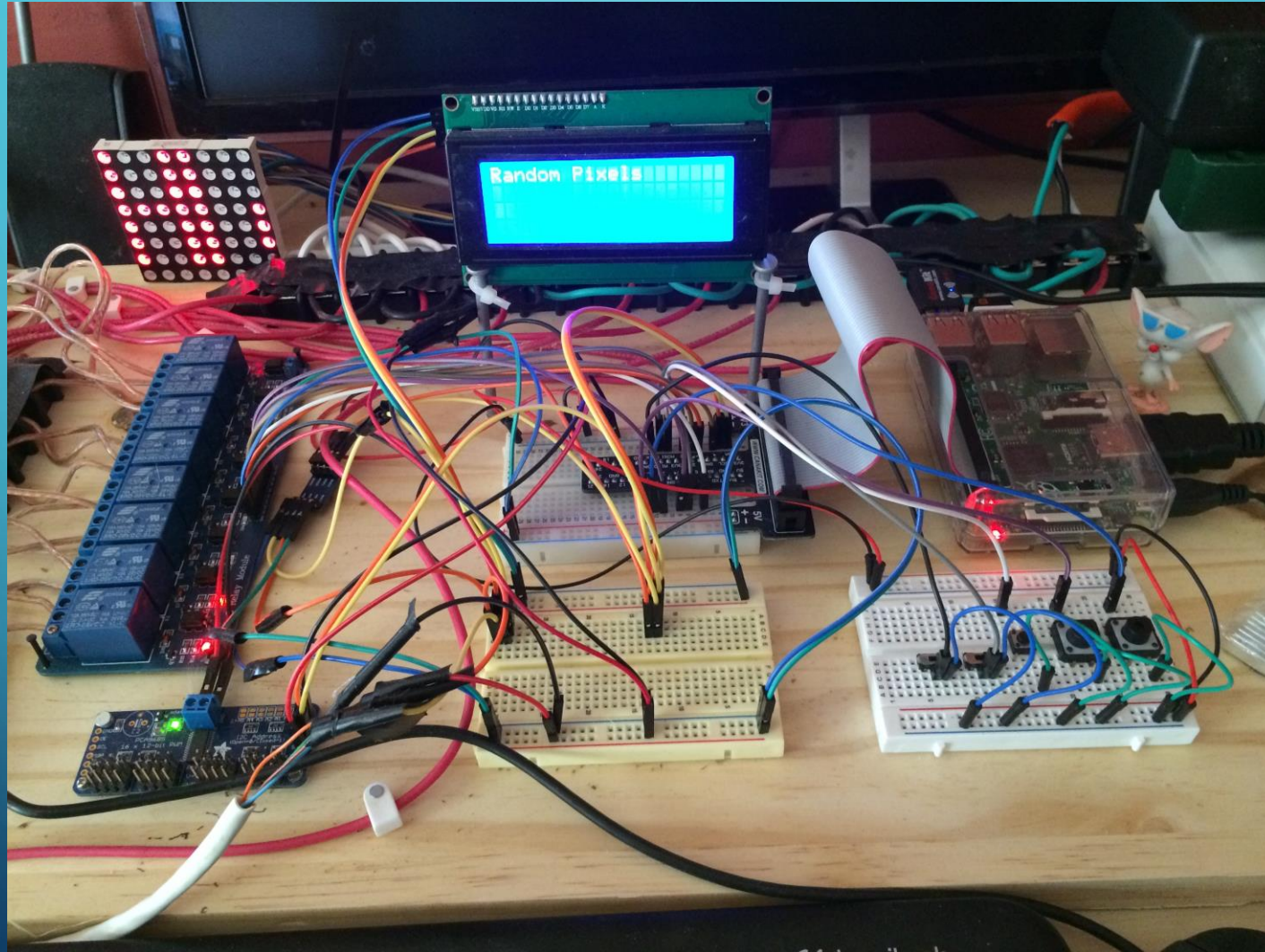
by
Bruce E. Hall, W8BH

Beginner's Guide to the PI MATRIX

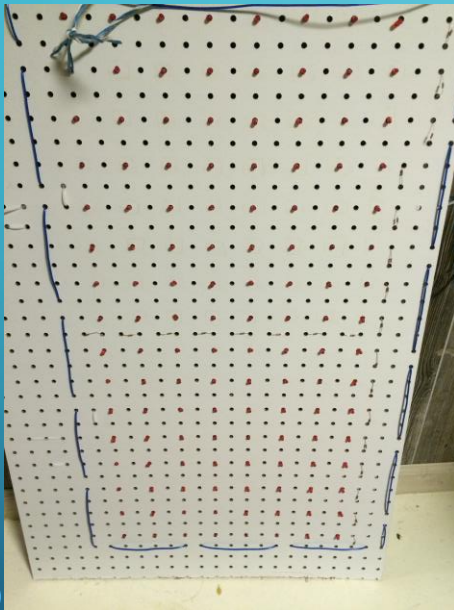
Part 4 :
Text Scrolling

[HTTP://W8BH.NET/PI/PIMATRIX4.PDF](http://w8bh.net/pi/pimatrix4.pdf)

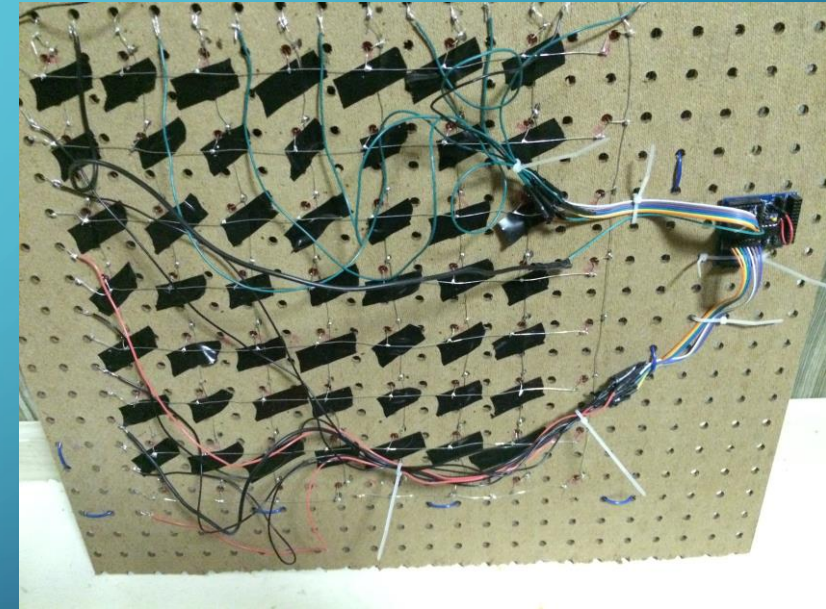
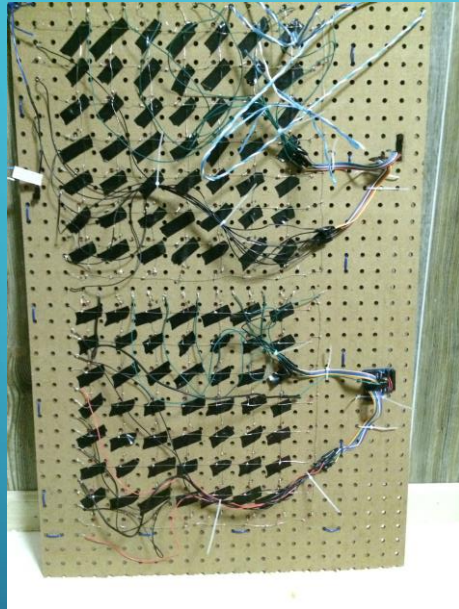
USING THE PI MATRIX TO DEVELOP & TEST



MAKING A BIGGER VERSION – THE CLEAN SIDE



HAVING FUN WITH A SOLDERING IRON



IN MY WINDOW AT XMAS

